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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/158,549	09/22/1998	JOHN S. HENDRICKS	5515	4086

7590 03/15/2002

ALDO NOTO
DORSEY & WHITNEY
1001 PENNSYLVANIA AVENUE NW
SUITE 300
WASHINGTON, DC 20004

EXAMINER

TUNDRA, DIMITRI

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 03/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

54

Office Action Summary

Application No.

09/158,549

Applicant(s)

HENDRICKS ET AL.

Examiner

Dimitri Tundra

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

- I. The examiner requests the applicant to submit all the nonpatent literature listed in the IDS.

Claim Objections

- II. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Independent claims 1, 12, 16, 27, 31, 36 and dependent claim 10 and 25 do not have antecedent bases for receiving, storing, and processing electronic mail. Thus, the filing date for these claims and their dependent claims is considered to be the filing date of the current application (09.22.98).

Claim Rejections - 35 USC § 112

- III. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding **claim 6**, the inventor uses the phrase "high volume memory", which renders the claim indefinite. In the art rejection the examiner interprets this phrase as "memory sufficient for general e-mail storage". Correction required.

Claim Rejections - 35 USC § 102

IV. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made
in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors
Protection Act of 1999 (AIPA) do not apply to the examination of this application
as the application being examined was not (1) filed on or after November 29,
2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this
application is examined under 35 U.S.C. 102(e) prior to the amendment by the
AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 7 – 9, 22 – 24 are rejected under 35 U.S.C. 102(e) as being
unpatentable by **Strubbe (US 5223924)**.

Regarding **claim 7, and 22** Strubbe shows the circuitry connected to the
television (which can be part of a settop box) for use with a television program
delivery system, comprising:

a memory for storing menu content information (fig. 3, items 52, 56);
a receiver for receiving digitally compressed program signals (col. 2, ln.
55, where the MPEG is a digitally compressed signal,) and control information
stream (col. 2, ln. 56 – 59);

a signal processor connected to the memory and the receiver for processing the control information stream to produce processed control information (fig. 3, item 50), whereby the processed control information is used to update the stored menu content information to produce updated menu content information (col. 2, ln. 59 – 60; ;

a generator connected to the memory for generating message and menu displays using the updated menu content information (col. 2, item 50), whereby the displays produce subscriber options for selection of other menus and television programs (col. 3, ln. 17 – 21, where other menus include liked or disliked program menus, bases on the initial menus);

a subscriber interface in communication with the generator for selecting messages, menus, television programs or for entry of subscriber inputs (remote control – col. 3, ln. 17 – 21, where the user can select liked/disliked programs from the menu, and later select the liked/disliked menu); and

a tuner connected to the interface for tuning to one of the digitally compressed program signals to produce a tuned television program signal (the fact that the system transmits MPEG data, as indicated above, inherently implies that the receiving unit should decompress it and convert it to the standard NTSC format for display on the television).

Regarding **claims 8 and 23**, Strubbe shows the advanced set top terminal according to claim 7, wherein said television program delivery system comprises digital video (col. 2, ln. 55, where MPEG is digital video).

Regarding **claim 9**, Strubbe shows the advanced set top terminal according to claim 7, further comprising:

a second signal processor connected to the tuner for processing the tuned television program signal to produce a video signal and audio signal for television display and listening (it is inherent for any system with MPEG compression, that there should be a signal processor to produce a video signal and audio signal for television display and listening – convert from MPEG to NTSC).

Regarding **claim 24**, Strubbe shows the method according to claim 22, further comprising the step of:

processing the tuned television program signal to produce a video signal and audio signal for television display and listening (inherent to any television system).

Claims 31, 33 – 36, 38 – 40 are rejected under 35 U.S.C. 102(e) as being unpatentable by **Remillard (US 5561708)**.

Regarding **claims 31 and 36**, Remillard shows an advanced set top terminal for use with a television program delivery system comprising:

a subscriber interface for entry of electronic mail (abstract and fig. 3 and 5, where remote control of fig. 5 is uses letters to enter words and sentences);

at least one memory for storing the electronic mail and for storing interactive programming instructions (fig. 2, item 102);

at least one processor connected to the memory and the subscriber interface for accessing the stored interactive programming instructions and for executing the stored interactive programming instructions to produce interactive signals which include electronic mail (fig. 2, item 100); and

a data transmitter connected to the at least one processor for transmitting the produced interactive signals (fig. 2, items 110 and 140).

Regarding **claims 33 and 38**, Remillard shows the advanced set top terminal according to claims 31 and 36 respectively, for use with on-line databases, interactive services and message services outside of the cable television program delivery system, further comprising a telephone modem (fig. 2, item 110), connected to the data transmitter adapted to provide communications capability with the on-line databases, the interactive services and the message services (abstract).

Regarding **claims 34 and 39**, Remillard shows the advanced set top (item 20 of fig. 1) terminal according to claims 31 and 36 respectively, wherein said data transmitter transmits the produced interactive signals to an operations center (the operations center can be items 38, 40, 46 in fig. 1).

Regarding **claims 35 and 40**, Remillard shows the advanced set top terminal according to claim 31 and 26 respectively, wherein said data transmitter

(item 20 of fig. 1) transmits the produced interactive signals to a cable headend or other remote location (fig. 1 items 34 – 46 are examples of remote locations).

Claim Rejections - 35 USC § 103

V. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1, 3 – 6 and 16, 18 – 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Langraf et al. (US 6154633) in view of Remillard (US 5561708)**.

Regarding **claims 1, 16** Langraf et al. shows a hardware upgrade for enhancing the functionality of a set top converter in a television program delivery system (Abstract); an interface for providing an electrical connection to the set top converter (item 207 of fig. 2)

Langraf et al. does not show a settop converter having a mailbox adapted to receive electronic mail; a memory for storing programming instructions, and one microprocessor connected to said memory.

Remillard shows the settop converter receiving e-mail (abstract), whereby the electronic mail is transferred from the set top converter for processing and the processed electronic mail is passed to the set top converter for display (it is inherent because all the e-mail related circuitry has been moved to the expansion card);

a memory for storing interactive programming instructions (fig. 2, item 102); and

at least one microprocessor connected to said memory and connected to said interface for accessing the stored interactive programming instructions and for processing the electronic mail to produce processed electronic mail based on the stored interactive programming instructions (CPU 100 of fig. 2).

It would have been obvious for one of ordinary skill in the art to modify Langraf et al. by including all the e-mail-related circuitry in the Upgrade Function Circuitry 201 of fig. 2 in order to add the e-mail capability to the users so that they can watch the e-mail on the TV screen.

Regarding **claim 3, 18**, Landgraf et al. in view Remillard show the hardware upgrade according to claims 1 and 16, respectively. They do not show the interface is a mailbox interface and the electronic mail is transferred between the set top converter and the mailbox interface in a serial or a parallel format. Remillard shows the parallel interface with connector used for printing purposes (fig. 2, col. 4, ln. 12 – 15; col. 6, ln. 43 – 49). It would have been obvious for one of ordinary skill in the art to use the same interface for connecting the settop box and the upgrade box, because this interface is very reliable and inexpensive.

Regarding **claim 4, 19**, Remillard further shows the hardware upgrade according to claim 1, wherein the interface comprises:

circuitry for receiving subscriber inputs from the set top converter, wherein the received subscriber inputs include textual information that is used to produce the processed electronic mail and for transferring the processed electronic mail to the set top converter for display (fig. 2, item 22; fig. 5; col. 7, ln. 53 – 56).

Regarding **claims 5, 15, 20**, Remillard further shows the hardware upgrade according to claim 1, for use with on-line databases, interactive services and message services outside of the television program delivery system (abstract – “electronic mail and other news and information services”), wherein the hardware upgrade further comprises a telephone modem connected to the at least one microprocessor and adapted to provide communications capability with the on-line databases, interactive services and message services (fig. 2, item 110; col. 6, ln. 55 – col. 7, ln. 6). In regards to the online services being outside of the television program delivery system, see fig. 1, item 36, which shows that the central office communicates with other networks, and thus can retrieve their data.

Regarding **claims 6, 21** Remillard further shows the hardware upgrade according to claim 4, further comprising:

a high volume memory connected to the at least one microprocessor for storing the processed electronic mail (fig. 2, item 102).

Claims 2, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Langraf et al. (US 6154633)** in view of **Remillard (US 5561708)** and **further in view of Blahut et al. (US 5539449)**.

Regarding **claims 2 and 17**, Langraf et al. in view of Remillard shows the hardware upgrade according to claim 1. Langraf et al. in view of Remillard does not show that the television program delivery system comprises digital video. Blahut et al. shows that the delivered signal can be digital (abstract). It would have been obvious for one of ordinary skill in the art to modify Langraf et al. in view of Remillard by including the digital signal for user reception, as taught by Blahut et al., because it allows more channels to be transmitted on the limited bandwidth compared to the analog signal.

Claims 10 – 15, 25 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Strubbe (US 5223924)** in view of **Remillard (US 5561708)**.

Regarding **claims 10 and 25**, Strubbe shows the advanced set top terminal according to claims 7 and 22 respectively. Strubbe does not show the advanced set top terminal capable of operating with an interactive electronic mail service conducted from a cable headend or other remote location. Remillard shows the terminal further comprising:

a memory for storing the interactive programming instructions (item 102 of fig. 2);

at least one processor connected to the memory for accessing the stored interactive programming instructions and for executing the stored interactive

programming instructions to produce interactive signals which include electronic mail (fig. 2, item 100; abstract in regards to e-mail); and

a data transmitter connected to the at least one processor for transmitting the produced interactive signals to the cable headend or the other remote location (modem 110 of fig. 2 is a transmitter and receiver of the signals).

It would have been obvious for one of ordinary skill in the art to modify Strubbe by adding interactivity and e-mail support in order to display the information on a big TV screen, rather than on a small monitor, thus allowing multiple users to watch the text.

Regarding **claims 11 and 26**, Strubbe further shows the advanced set top terminal according to claim 7 and 25 respectively. Strubbe does not show the advanced set top terminal for use with on-line databases, interactive services and message services outside of the television program delivery system, wherein the hardware upgrade further comprises a telephone modem, connected to the at least one processor adapted to provide communications capability with the on-line databases, interactive services and message services. Remillard shows the advanced set top terminal for use with on-line databases, interactive services and message services outside of the television program delivery system (abstract "other news and information services" and fig. 1), wherein the hardware upgrade further comprises a telephone modem, connected to the at least one processor adapted to provide communications capability with the on-line databases, interactive services and message services (fig. 2, item 110; col. 6, ln.

55 – col. 7, ln. 6). It would have been obvious for one of ordinary skill in the art to modify Strubbe by adding news and interactive service capability in order to display them on a big TV screen, rather than on a small monitor.

Regarding **claims 12 and 27**, Strubbe further shows a system to provide a subscriber electronic mail services with a remotely located computer using a series of individual menus, comprising:

an operations center for generating menu control information in digitally compressed form and transmitting said menu control information (col. 2, ln 50 - 60 show the video being transmitted in a digitally compressed form of the MPEG and schedule programs without compression. He does not show the schedule data being compressed. It would have been obvious for one of ordinary skill in the art to modify Strubbe by digitally compressing and transmitting through MPEG not only the audio-video data, but also the program schedule data in order to minimize the bandwidth, and then separate them at the settop box). Strubbe does not disclose where the information is created, he only mentions a digital transmission system. It would have been obvious for one of ordinary skill in the art to modify Strubbe by making an operations center a part of digital transmission system in order to separate the network system (headend) from the EPG creation system (operations center).

a cable headend for receiving said transmitted menu control information and transmitting said transmitted menu control information to at least one television terminal (col. 6, ln. 25 – 29); and

at least one television terminal for displaying menus on a television,
wherein said at least one television terminal comprises:

a decompressor for decompressing the menu control information (Strubbe does not discuss decompressing the MPEG data or whether it is done in the TV or the settop box. It is inherent that the system should decompress the MPEG data before it is displayed on the TV screen, and it obvious for one of ordinary skill in the art to put this decompression circuit inside the TV in order to be able to receive multiple MPEG sources without the settop box);

Strubbe does not discuss in details a menu generator for generating menus from the menu control information. Remillard shows a menu in fig. 4, which inherently implies that this menu has to be generated from the menu control information). It would have been obvious for one of ordinary skill in the art to modify Strubbe by including the menu generating means in order to make the system convenient in regards to interactivity.

Strubbe does not show a subscriber interface for interactively entering information using said generated menus. Remillard shows that the system is capable of transmitting and receiving e-mail through the menu windows (Abstract) and the use of keyboard-type remote of fig. 5 enables the users to enter text. It would have been obvious for one of ordinary skill in the art to modify Strubbe by adding menu with entering text capability, such as e-mail, in order to communicate with other people through the e-mail over the TV.

a transmitter for communicating with said cable headend (Remillard Fig. 2, item 110);

a receiver for receiving electronic mail from said cable headend (Remillard Fig. 2, item 110); and

a text and graphics video plane combiner for integrating the electronic mail into menus (abstract).

Regarding **claims 13 and 28**, Strubbe further shows the television program delivery system comprising digital video (col. 2, ln. 55)

Regarding **claims 14 and 29**, Remillard further shows the system wherein said cable headend further comprises a network controller for providing electronic mail services (fig. 2, item 110 is a modem, and it inherently implies that the head end should have another modem, which is a network controller, to communicate with the modem at the settop box).

Regarding **claims 15 and 30**, Remillard further shows the system wherein the hardware upgrade further comprises a telephone modem, connected to the menu generator adapted to provide communications capability with online databases, interactive services and message systems (fig. 2, item 110; col. 6, ln. 55 – col. 7, ln. 6). In regards to the online services being outside of the television program delivery system, see fig. 1, item 36, which shows that the headend communicates with other networks, and thus can retrieve their data.

Claims 32 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Remillard (US 5561708) in view of Blahut et al. (US 5539449)**.

Regarding **claims 32 and 37**, Remillard shows the hardware upgrade according to claim 31 and 36 respectively. Remillard does not show that the television program delivery system comprises digital video. Blahut et al. shows that the delivered signal can be digital (abstract). It would have been obvious for one of ordinary skill in the art to modify Remillard by including the digital signal for user reception, because it allows more channels to be transmitted on the limited bandwidth compared to the analog signal.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Young et al. (US 5353121) shows a CATV system with advanced menu and e-mail capability.

Remillard (US 5396546) shows television system with EPG and extended networking access.

LaJoie et al. (US 5850218) shows an advanced EPG system with e-mail capability for CATV users.

Contact Fax Information

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or Faxed to:

(703) 372-9314, (for formal communication intended for entry)

or:

(703) 308-5399, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dimitri Tundra whose telephone number is (703) 605-4246. The examiner can normally be reached Monday – Thursday, 8:30AM – 6:00PM and every even week of the month on Friday 8:30 AM – 5:00PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5399.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

DT:dt
March 08, 2002


CHRIS GRANT
PRIMARY EXAMINER

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes **incorporated** therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.